

Title: **Returns of Different Cropping Systems in Disease-Affected Shrimp Areas in Southwest Bangladesh: An Economic Evaluation**

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Abstract: This study investigated cropping systems and economic analyses in disease-affected shrimp farming areas in southwest Bangladesh. Key data were collected using a questionnaire between June and August 2002. The identified farming systems were shrimp, shrimp+paddy, and paddy respectively. In shrimp+paddy farming, paddy was introduced in shrimp farm by converting a part of the shrimp land during monsoon period to make additional income and risk aversion of the shrimp disease. Among the farming systems, shrimp+paddy required higher investment (US\$ 1,189.20/ha or 69,568.74 tk/ha) than shrimp monoculture (US\$ 1,084.40/ha or 63,437.54 tk/ha) and paddy farming (US\$ 148.58/ha or 8,692.36 tk/ha). The average yield from only shrimp farming was 322.11 kg/ha, which was higher than that of shrimp (213.54 kg/ha) in shrimp+paddy farming. The average yield from the paddy was almost double (2,701.42 kg/ha) than that of paddy in shrimp+paddy farming (1,583.26 kg/ha). The gross margin was also found more than double in paddy (14,342.63 tk/ha or US\$ 245.16) than paddy in shrimp+paddy farming (6,255.87 tk/ha or US\$ 106.93). The return to total cost of shrimp was found negative profit (0.78 tk and 0.53 tk) in both farming systems due to mass mortality and sold at lower price. The return to total cost of paddy was higher (2.65 tk) than that of paddy (2.23 tk) in shrimp+paddy farming.